→ Dr McAllister

COUNCIL FOR TOBACCO RESEARCH

Grant Application

Title of Application: Gordon Research Conference on Phagocytes

Principal Investigator/Conference chairman:

Name: Peter Elsbach, M.D.

Position title:Chairman of conference

Tel.#: (212) 340-5633 Social Security # [redacted]

Mailing address:
Gordon Research Conferences,
Gordon Research Center
University of Rhode Island
Kingston, RI 02881-0801

Tel.#(401)783-4011

Proposed dates:
6/29/87-7/3/87

Desired starting date:
6/29/87

Principal Investigator/
project director:

Name:
Peter Elsbach

Signature: Date

Peter Elsbach 9/19/86

Title:
Professor of Medicine
Department of Medicine
New York University Medical Center
550 First Avenue
New York, NY 10016
Tel.#(212)340-5633

Authorized Organizational
Representative:

Name:
Alexander M. Cruikshank
Director
Gordon Research Center
University of Rhode Island
Kingston, RI 02881-0801

Signature Date

X Alexander M. Cruikshank 9/29/86

P [redacted]

TABLE OF CONTENTS

NAME OF INSTITUTION (INCLUDE BRANCH/CAMPUS AND SCHOOL OR DIVISION)

Gordon Research Conferences

ADDRESS (INCLUDE DEPARTMENT)

Gordon Research Conferences
Gordon Research Center
University of Rhode Island
Kingston, RI 02881-0801

PRINCIPAL INVESTIGATOR(S)

Peter Elsbach, M.D.

TITLE OF PROJECT

Gordon Conference on Phagocytes

TECHNICAL ABSTRACT (LIMIT TO 22 PICA OR 18 ELITE TYPEWRITTEN LINES)

The Gordon Research Conferences are designed to promote in-depth communication between the most active research workers in rapidly developing disciplines. The workshop nature of the conference fosters interactions by investigators who exchange their most recent, unpublished, results. The 1987 conference on Phagocytes will be the 4th in a series started in 1981. The initiation and the need for continuation of the series reflect the extraordinarily rapid expansion of the field of study of phagocyte function in health and disease at the molecular level.

The 1987 conference will have as its theme: Proteins involved in phagocyte function.

The specific topics are:

1) Protein mediators in inflammatory responses and phagocyte function.
2) Proteins involved in adhesion and migration of phagocytes.
3) Synthesis and function of plasma membrane and cytoplasmic granule proteins during differentiation of phagocytes.
4) Proteins involved in stimulus-response coupling.
5) Cytotoxic proteins
6) Molecular basis of defective respiratory burst.

A. Specific Aims:

Background, progress in the field

The essential role played by PMN and mononuclear phagocytes in dealing with foreign or transformed cells threatening the host, rests on an ordered sequence of events that includes: recognition of chemical signals, migration, establishing surface interaction, metabolic responses, ingestion, cytocidal action and digestion of the killed target cell.

Our understanding of the physiological basis of each of these elements in phagocyte function has vastly increased in the past 15 years, thanks to an exponential expansion in the number and quality of scientists that have made this field their focus. The biennial Gordon conferences on phagocytes, starting in 1981, have barely been able to keep up with the ever more rapid accumulation of exciting new findings in need of prompt exposure to the scientists that attend these meetings. Since the last conference in 1985, the progress in the application of advanced molecular biological technology to proteins involved in phagocyte function has been extraordinary. The program of the 1987 conference reflects this progress and we have been able to assemble a group of outstanding scientists whose very recent findings represent major advances and breakthroughs.

That the focus of this program differs from that of the previous conferences is evident from the fact that of the 23 speakers invited so far (all of whom have accepted their invitations) 17 have not attended any of the previous 3 conferences and 20 were not present at the last meeting. Only the co-chairman (Dr. Ralph Snyderman), Dr. Carl Nathan and Dr. J. Tschopp have spoken before. On the other hand, all of the Session chairpersons that have been invited so far have been active participants in the past, and through their specific expertise, are expected to place the new findings in the proper context and to provide connections between the sessions.

B. Significance and Design of Program

The recognition that fundamental new discoveries leading to real advances in the biological and medical sciences are now coming from studies on the molecular and structural basis of the function of bioactive molecules is particularly pertinent to future research on the role of phagocytes in inflammation, host-defense against infection and malignant cells, vascular lesions (atherosclerosis) and autoimmune diseases.

We have therefore invited those scientists whose most recent work on the molecular and functional characterization of molecules (proteins) best illustrates the effectiveness of this approach and the new techniques.

The nearly completed program is as follows:

(A few openings in the program have been left deliberately to allow inclusion of additional speakers, as we become aware of especially novel findings in the near future).

[redacted]

Program

- Protein mediators of inflammatory responses and phagocyte function

Session leader: Carl Nathan, Cornell U.

Speakers: Carl Nathan: Interferon
Bruce Beutler, Howard Hughes Institute, Southwestern U: Tumor necrosis factor/cachectin.
Jeffrey Browning, Biogen: Lipocortin.
Victor Nussenzweig, NYU: Decay accelerating factor.
Alan Aderem, Rockefeller U.: Myristoylation of macrophage proteins.
Stephen Weiss, Michigan U.: Regulation of proteases by O_2-derivatives.

- Role of adhesion molecules in migration

Session leaders: Marco Baggiolini, U. of Bern; John Gallin, NIH.

Speakers: Ira Goldstein, UCSF: Synexin.
Lance Liotta, NIH: Laminin.
Erkki Ruoslahti, La Jolla Cancer Research foundation: Fibronectin.
Sam Wright, Rockefeller U.: Fibronectin receptors of macrophages.
Vincent Marchesi, Yale U.: Cytoskeleton and surface glycoproteins.

- Synthesis and function of plasma membrane and cytoplasmic granule proteins during differentiation of phagocytes.

Session leader: Inge Olsson, U. of Lund.

Speakers: Timothy Springer, Harvard U.: Surface glycoproteins.
Doug Fearon, UCSF: Phosphorylation of receptor proteins.
Margaret Haberland, UCLA: maleoyl albumin receptor.
William Nauseef, U. of Iowa: Biosynthesis of myeloperoxidase.

- Proteins and stimulus-response coupling

Session leader: Ralph Snyderman, Duke U.

Speakers: Ralph Snyderman: N-proteins.
Axel Ullrich, Genentech: Protein Kinase C.
?

- Cytotoxic proteins

Session leaders: Peter Elsbach, NYU; Robert Lehrer, UCLA.

Speakers: Ben de Kruyff, U. of Utrecht: Protein insertion into membranes.
Eckhard Podack, N.Y. Medical College: Membrane attack complex (complement).
Gerald Gleich, Mayo Clinics: Cytotoxins of eosinophils.
Jürg Tschopp, U. of Lausanne: Cytotoxic proteases and proteoglycans.

- Molecular basis of defective respiratory burst
Session leader: Seymour Klebanoff, U. of Washington
Speakers: Stuart Orkin, Harvard U.: Identification of missing gene in CGD.
?
?

To enable younger participants in particular to present their work poster presentations will be encouraged.

Related Conferences

Bacteria-host cell interaction -

1987 UCLA Symposia on molecular and cellular biology
2/13-2/19/87 Park City, Utah.

The focus of this conference is primarily on microbial properties that determine host-parasite relationships. There is almost no overlap between this conference and the 4th Gordon Research conference on phagocytes. Only Dr. S. Wright from Rockefeller U. will speak at both conferences, but on different subjects.

BIOGRAPHICAL SKETCH

Give the following information for key professional personnel listed on page 2, beginning with the Principal Investigator/Program Director. Photocopy this page for each person.

NAME	TITLE	BIRTHDATE (Mo., Day, Yr.)
Peter Elsbach, M.D.	Professor of Medicine	11/9/24

EDUCATION (Begin with baccalaureate or other initial professional education and include postdoctoral training)

INSTITUTION AND LOCATION	DEGREE (circle highest degree)	YEAR CONFERRED	FIELD OF STUDY
University of Amsterdam Medical School	M.D.	1950	Medicine
Internship Amsterdam University Hospital	-	1950-53	Medicine
Med. Residency NYU Bellevue Hospital		1953-56	Medicine
Research Assoc. Rockefeller University		1956-59	Clinical Investigation
			Cell Physiology

RESEARCH AND/OR PROFESSIONAL EXPERIENCE: Concluding with present position, list in chronological order previous employment, experience, and honors. Include present membership on any Federal Government Public Advisory Committee. List, in chronological order, the titles and complete references to all publications during the past three years and to representative earlier publications pertinent to this application. DO NOT EXCEED TWO PAGES. Honors: D. Med. Sci. Univ. of Leiden, cum laude '64; Career Scientist, Health Res. Council, City of New York, '64-'75; Am.Soc.Clin.Invest; Am.Assoc.Physicians; Josiah Macy Jr. Faculty Scholar Award, '75-'76; Elected Fellow NY Acad.Sci. '78; Elected Correspondent Member Royal Dutch Acad. Sci. '79; Editorial Boards: J.Lipid Res. '67-'85; Proc.Soc. Exp.Biol. Med. '74-'80; Infect.Immun. '80-present.
Vice-Chrmn; Chrmn Gordon Conf. Phagocytes '85/'87.

Assistant & Chief Resident in Medicine, NYU Medical Division, 1954-56.
Res. Associate & Asst. Physician, Rockefeller University, New York, 1956-59.
Instructor, Department of Medicine, NYU School of Medicine, 1959-61.
Assistant Professor, Department of Medicine, NYU School of Medicine, 1961-68.
Associate Professor, Department of Medicine, NYU School of Medicine, 1968-72.
Professor of Medicine, Department of Medicine, 1972 to date.

Selected Publications:

Elsbach, P., Pettis, P., Beckerdite, S. and Franson, R. The effects of phagocytosis by rabbit granulocytes on macromolecular synthesis and degradation in different species of bacteria. J. Bacteriol. 115:490, 1973.

Elsbach, P. On the interaction between phagocytes and microorganisms. New Eng. J. Med. 289:846, 1973.

Beckerdite, S., Mooney, C., Weiss, J., Franson, R., and Elsbach, P. Early and discrete changes in permeability of E.coli and certain other gram negative bacteria during killing by granulocytes. J. Exp. Med. 740:396, 1974.

Weiss, J., Elsbach, P., Olsson, I. and Odeberg, H. Purification and characterization of a potent bactericidal and membrane-active protein from the granules of human polymorphonuclear leukocytes. J. Biol. Chem. 253:2664, 1978.

Elsbach, P., Weiss, J., Franson, R.C., Beckerdite-Quagliata, S., Schneider, A., and Harris, L. Separation and purification of a potent bactericidal/permeability increasing protein and a closely associated phospholipase A2 from rabbit polymorphonuclear leukocytes. Observations on their relationship. J. Biol. Chem. 254:11000, 1979.

Weiss, J., Beckerdite-Quagliata, S. and Elsbach, P. Determinants of the action of phospholipases A on the envelope phospholipids of Escherichia coli. J. Biol. Chem. 254:11010, 1979.

Elsbach, P. Degradation of microorganisms by phagocytic cells. Revs. Inf. Dis. 2:106, 1980.

Elsbach, P. and Weiss, J. O_2-independent bactericidal systems of polymorphonuclear leukocytes. Adv. Inflamm. Res. 2:95-113, 1981.

Weiss, J., Victor, M., Stendhal, O., and Elsbach, P. Killing of gram-negative bacteria by polymorphonuclear leukocytes. Role of an O_2-independent bactericidal system. J. Clin. Invest. 69:959, 1982.

Weiss, J., Victor, M., Cross, A.S., and Elsbach, P. The sensitivity of K1-encapsulated Escherichia coli to killing by the bactericidal/permeability-increasing protein of rabbit and human neutrophils. Infect. Immun. 38:1149, 1982.

BIOGRAPHICAL SKETCH (cont)

Forst, S., Weiss, J., and Elsbach, P. The role of phospholipase A2 lysines in phospholipolysis of Escherichia coli killed by a membrane-active neutrophil protein. J. Biol. Chem. 257:14055, 1982.

Weiss, J., Stendahl, O., and Elsbach, P. O_2-independent killing of gram-negative bacteria by intact granulocytes. The role of a potent bactericidal membrane-perturbing protein. In: Rossi, F. and Patriarca, P. (Eds.). Biochemistry and function of phagocyt Advances in Experimental Medicine and Biology 141:129-137, Plenum Press, 1982.

Weiss, J., Victor, M., and Elsbach, P. The role of charge and hydrophobic interact in the action of the bactericidal/permeability increasing protein of neutrophils on Gram-negative bacteria. J. Clin. Invest. 71:540, 1983.

Elsbach, P. and Weiss, J. A reevaluation of the role of O_2-dependent and independe microbicidal systems of phagocytes. Revs. Infect. Dis. 5:843-853, 1983.

Weiss, J., Muello, K., Victor, M. and Elsbach, P. The role of lipopolysaccharides in the action of the bactericidal/permeability increasing protein on the bacterial envel J. Immunol. 132:3109-3115, 1984.

Elsbach, P., Weiss, J., and Kao, L. The role of intramembrane Ca^{2+} in the hydrolysi of the phospholipids of Escherichia coli by Ca^{2+}-dependent phospholipases. J. Biol. Che 260:1618-1622, 1985.

Weiss, J., Kao, L., Victor, M., and Elsbach, P. O_2-independent intracellular and O_2-dependent extracellular killing of Escherichia coli by human polymorphonuclear leukocytes. J. Clin. Invest. 76:206-212, 1985.

Weiss, J., Victor, M., Kao, L., and Elsbach, P. Killing of gram-negative bacteria by neutrophils: Role of O_2-independent system on intracellular killing and evidence of O_2-dependent extracellular killing. In: Mechanisms of cell-mediated cytotoxicity II Plenum Press, New York, 1985.

Forst, S., Weiss, J., Blackburn, P., Frangione, B., Goni, F., and Elsbach, P. Amino acid sequence of a basic phospholipase A2 from Agkistrodon halys blomhoffii. Possible role of NH_2-terminal lysines in action of phospholipids of Escherichia coli. *Biochemistry, 25:4309-4314, 1986.*

Elsbach, P., and Weiss, J. Oxygen-dependent and oxygen-independent mechanisms of microbicidal activity of neutrophils. Immunol. Letters 11:159-163, 1985

Elsbach, P., Weiss, J. and Forst, S. Determinants of the action of phospholipases on the phospholipids of gram-negative bacteria (E.coli) In: Lipids and Biomembranes: Past, Present and Future (1986). Eds. Op den Kamp, J.A.F., van den Bosch, H., de Gier, J de Haas, G.H., Roelofsen, B., and Wirtz, J.W.A. Elsevier Science Publishers, Amsterdam, The Netherlands, pp.259-286.

Elsbach, P. and Weiss, J. Non-oxidative anti-microbial systems: In: Inflammation: Basic principles and clinical correlates. Eds. J. Gallin, I. Goldstein and R.Snyderman. Raven Press, New York, (in press).

BIOGRAPHICAL SKETCH

Give the following information for key professional personnel listed on page 2, beginning with the Principal Investigator/Program Director. Photocopy this page for each person.

NAME	TITLE	BIRTHDATE (Mo., Day, Yr.)
Ralph Snyderman	Frederic M. Hanes Professor of Medicine; Professor of Immunology; Chief, Division of Rheumatology & Immunology	3/13/40

EDUCATION (Begin with baccalaureate or other initial professional education and include postdoctoral training)

INSTITUTION AND LOCATION	DEGREE (circle highest degree)	YEAR CONFERRED	FIELD OF STUDY
Washington College, Chestertown, MD	B.S.	1961	Biology
State University of New York, Downstate Medical Center, Brooklyn, NY	M.D.	1965	Medicine

RESEARCH AND/OR PROFESSIONAL EXPERIENCE: Concluding with present position, list in chronological order previous employment, experience, and honors. Include present membership on any Federal Government Public Advisory Committee. List, in chronological order, the titles and complete references to all publications during the past three years and to representative earlier publications pertinent to this application. DO NOT EXCEED TWO PAGES.

1965 - Medical Intern, Duke University Hospital, Durham, North Carolina.

1966 - Medical Resident, Duke University Hospital, Durham, North Carolina.

1967 - Surgeon, USPHS, Immunology Section of the Laboratory of Microbiology and Immunology, National Institute of Dental Research, National Institutes of Health Bethesda, Maryland.

1969 - Senior Staff Fellow, Immunology Section of the Laboratory of Microbiology and Immunology, National Institute of Dental Research, National Institutes of Health Bethesda, Maryland.

1970 - Senior Investigator, Immunology Section of the Laboratory of Microbiology and Immunology, National Institute of Dental Research, National Institutes of Health Bethesda, Maryland.

1972 - Assistant Professor of Medicine and Assistant Professor of Immunology, Duke University Medical Center; Chief, Division of Rheumatology, Durham Veterans Administration Hospital, Durham, North Carolina. Howard Hughes Medical Investigator.

1974 - Associate Professor of Medicine and Assistant Professor of Immunology, Duke University Medical Center; Chief, Division of Rheumatology, Durham Veterans Administration Hospital, Durham, North Carolina. Howard Hughes Medical Investigator. Adjunct Assistant professor of Oral Biology, University of North Carolina School of Dental Medicine, Chapel Hill, North Carolina.

1975 - Associate Professor of Medicine; Associate Professor of Immunology; Chief, Division of Rheumatic and Genetic Diseases, Duke University Medical Center, Howard Hughes Medical Investigator, Faculty, Duke Comprehensive Cancer Center, Durham, North Carolina.

1977 - Professor of Medicine; Associate Professor of Immunology; Chief, Division of Rheumatic and Genetic Diseases, Duke University Medical Center, Director, Laboratory of Immune Effector Function, Howard Hughes Medical Institute, Faculty Duke Comprehensive Cancer Center, Durham, North Carolina.

1980 - Professor of Medicine; Professor of Immunology; Chief, Division of Rheumatic and Genetic Diseases, Duke University Medical Center, Director, Laboratory of Immune Effector Function, Howard Hughes Medical Institute, Faculty, Duke Univers Comprehensive Cancer Center, Durham, North Carolina.

1984 - Frederic M. Hanes Professor of Medicine; Professor of Immunology; Chief, Divisio of Rheumatology and Immunology, Duke University Medical Center, Director, Laboratory of Immune Effector Function, Howard Hughes Medical Institute, Faculty Duke University Comprehensive Cancer Center, Durham, North Carolina.

HONORS:

Frederic M. Hanes Distinguished Professor of Medicine
Humboldt Award-Federal Republic of Germany
McLaughlin Award for Inflammation Research
Merck Faculty Development Award
Magna Cum Laude, M.D
Alpha Omega Alpha
Phi Beta Kappa

FEDERAL GOVERNMENT PUBLIC ADVISORY COMMITTEES:
National Arthritis Advisory Board, National Institutes of Health, 1985-1988
National Advisory Dental Research Council, National Institutes of Health, 1978-1981
NIDR Ad Hoc Consultant Panel on Centers/Large Grants, 1984-

PUBLICATIONS: (Selected bibliography from 230 publications)

Verghese, M.W. and Snyderman, R. Endotoxin(LPS) stimulates in vitro migration of macrophages from LPS resistant mice but not from LPS sensitive mice. J. Immunol. 128:608, 1982.

Pike, M.C. and Snyderman, R. Transmethylation reactions regulate affinity and functiona activity of chemotactic factor receptors on macrophages. Cell 28:107, 1982.

Stephans, C.G. and Snyderman, R. Cyclic nucleotides regulate the morphologic alteration required for chemotaxis in monocytes. J. Immunol. 128(3):1192, 1982.

Koo, C., Lefkowitz, R.J., and Snyderman, R. The oligopeptide chemotactic factor recepto on human polymorphonuclear leukocyte membranes exists in two affinity states. Biochem. Biophys. Res. Commun. 106(2):442, 1982.

Lohr, K.M. and Snyderman, R. Amphotericin B alters the affinity and functional activity of the oligopeptide chemotactic factor receptor on human polymorphonuclear leukocytes. J. Immunol. 129(4):1594, 1982.

Yuli, I., Tomonaga, A., and Snyderman, R. Chemoattractant receptor functions in human polymorphonuclear leukocytes are divergently altered by membrane fluidizers. Proc. Nat. Acad. Sci. 79:5906, 1982.

Verghese, M.W. and Snyderman, R. Hormonal activation of adenylate cyclase in macrophage membranes is regulated by guanine nucleotides. J. Immunol. 130:869, 1983.

McPhail, L.C. and Snyderman, R. Activation of the respiratory burst enzyme in human polymorphonuclear leukocytes by chemoattractants and other soluble stimuli:evidence that the same oxidase is activated by different transductional mechanisms. J. Clin. Invest. 72:192-200, 1983.

Kay, G.E., Lane, B.C. and Snyderman, R. Induction of selective biological responses to chemoattractants in a human monocyte-like cell line. Infect. Immun. 41(3):1166, 1983.

Koo, C., Lefkowitz, R.J. and Snyderman, R. Guanine nucleotides modulate the binding affinity of the oligopeptide chemoattractant receptor on human polymorphonuclear leukocytes., J. Clin. Invest. 72:748, 1983.

Snyderman, R., Pike, M.C., Edge, S., and Lane, B. A chemoattractant receptor on macrophages exists in two affinity states regulated by guanine nucleotides. J. Cell Biol. 98:444-448, 1984.

Yuli, I. and Snyderman, R. Rapid changes in light scattering from human polymorphonuclear leukocytes exposed to chemoattractants:discrete responses correlated with chemotactic and secretory functions. J. Clin. Invest. 73:1408-1417, 1984.

Snyderman, R. Immunopathology. In Zinsser Textbook of Microbiology, 18th Edition, W. Joklik, ed., Appleton-Century-Croft Publishing Corp., New York, pp. 367-373, 1984.

McPhail, L.C., Clayton, C.C., and Snyderman, R. A potential second messenger role for unsaturated fatty acids:activation and modulation of Ca^{2+}-dependent protein kinase.

DO NOT TYPE IN THIS SPACE—BINDING MARGIN

Science 224:622-625, 1984.

Benyunes, M.C. and Snyderman, R. Characterization of an oligopeptide chemoattractant receptor on human blood monocytes using a new radioligand. Blood 63(3):588-592, 1984.

Snyderman, R. and Pike, M.C. Chemoattractant receptors on phagocytic cells. In Annual Review of Immunology, Vol. 2, W.E. Paul, ed., Annual Reviews Inc., Palo Alto, CA, pp. 257-281, 1984.

Snyderman, R. Mechanisms of inflammation and tissue destruction in the rheumatic diseases. In Cecil Textbook of Medicine, 17th Edition, J.B. Wyngaarden, ed., W.B. Saunders Co., Philadelphia, pp. 1898-1906, 1984.

Snyderman, R. Regulatory mechanisms of a chemoattractant receptor on leukocytes:chemotactic and secretory signals are independently transduced. Fed. Proc. 43(12):2743-2748, 1984.

Yuli, I. and Snyderman, R. Light scattering by polymorphonuclear leukocytes stimulated to aggregate under various pharmacological conditions. Blood 64(3):649-655, 1984.

McPhail, L.C., Clayton, C.C., and Snyderman, R. The NADPH oxidase of human polymorphonuclear leukocytes:Evidence for regulation by multiple signals. J. Biol. Chem 259:5768-5775, 1984.

Snyderman, R. Structure and function of monocytes and macrophages. In Arthritis and Allied Conditions, D. McCarty, ed., Lea & Febriger, Philadelphia, pp. 287-308, 1985.

Verghese, M.W., Smith, C.D., and Snyderman, R. Potential role for a guanine nucleotide regulatory protein in chemoattractant receptor mediated polyphosphoinositide metabolism, Ca^{++} mobilization and cellular responses by leukocytes. Biochem. Biophys. Res. Commun. 127:450-457, 1985.

McPhail, L.C., Shirley, P.S., Clayton, C.C., and Snyderman, R. Activation of the respiratory burst enzyme from human neutrophils in a cell-free system:evidence for a soluble co-factor. J. Clin. Invest. 75:1735-1739, 1985.

Smith, C.D., Lane, B.C., Kusaka, I., Verghese, M.W., and Snyderman, R. Chemoattractant-receptor induced hydrolysis of phosphatidylinositol 4,5-bisphosphate in human polymorphonuclear leukocyte membranes:Requirement for a guanine nucleotide regulatory protein. J. Biol. Chem. 260:5875-5878, 1985.

Verghese, M.W., Fox, K., McPhail, L.C., and Snyderman, R. Chemoattractant-elicited alterations of cAMP levels in human polymorphonuclear leukocytes require a Ca^{++} dependent mechanism which is independent of transmembrane activation of adenylate cyclase. J. Biol. Chem. 260:6769-6775, 1985.

Snyderman, R. and Lane, B.C. Inflammation and chemotaxis. In Endocrinology, 2nd Edition, L.J. DeGroot, ed., Grune & Stratton, Orlando, 1985, in press.

Snyderman, R. Mechanisms of inflammation and leukocyte chemotaxis in the rheumatic diseases. In Medical Clinics of North America, "Rheumatic Diseases", R. Snyderman, ed., W.B. Saunders Co., Philadelphia, 1986.

Wolfson, M., McPhail, L.C., Nasrallah, V.N. and Snyderman, R. Phorbol myristate acetate mediates redistribution of protein kinase C in human neutrophils:potential role in the activation of the respiratory burst enzyme. J. Immunol., 1985, 135:2057-2062.

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OMB No. 3145-0058
Exp. Date 12/31/85

APPENDIX V

SUMMARY PROPOSAL BUDGET

FOR NSF USE ONLY		
PROPOSAL NO.	DURATION (MONTHS) Proposed	Granted
AWARD NO.		

ORGANIZATION

PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR

A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title; A.6. show number in brackets)	NSF FUNDED PERSON-MOS CAL.	ACAD.	SUMR.	FUNDS REQUESTED BY PROPOSER	FUNDS GRANTED BY NSF (IF DIFFERENT)
1. Peter Elsbach, M.D.				$ 0	$
2. Ralph Snyderman, M.D.				0	
3.					
4.					
5. ( ) OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PAGE)					
6. ( ) TOTAL SENIOR PERSONNEL (1-5)					
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. ( ) POST DOCTORAL ASSOCIATES					
2. ( ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)					
3. ( ) GRADUATE STUDENTS					
4. ( ) UNDERGRADUATE STUDENTS					
5. ( ) SECRETARIAL-CLERICAL					
6. ( ) OTHER					
TOTAL SALARIES AND WAGES (A+B)					
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A+B+C)				0	
D. PERMANENT EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING $1,000:)					
TOTAL PERMANENT EQUIPMENT				0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS) 27 persons)				18,000	
2. FOREIGN 7 persons)					
F. PARTICIPANT SUPPORT COSTS					
1. STIPENDS $					
2. TRAVEL					
3. SUBSISTENCE)					
4. OTHER Registration)				9,350	
TOTAL PARTICIPANT COSTS					
G. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES				0	
2. PUBLICATION COSTS/PAGE CHARGES				0	
3. CONSULTANT SERVICES				0	
4. COMPUTER (ADPE) SERVICES				0	
5. SUBCONTRACTS				0	
6. OTHER					
TOTAL OTHER DIRECT COSTS				27,350	
H. TOTAL DIRECT COSTS (A THROUGH G)					
I. INDIRECT COSTS (SPECIFY)					
TOTAL INDIRECT COSTS				0	
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)				27,350	
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS GPM 282 AND 283)					
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)				$27,350	$

PI/PD TYPED NAME & SIGNATURE*	DATE	FOR NSF USE ONLY
Peter Elsbach	9/19/86	INDIRECT COST RATE VERIFICATION
INST. REP. TYPED NAME & SIGNATURE* Alexander M. Cruikshank	DATE	Date Checked / Date of Rate Sheet / Initials - DGC / Program

*SIGNATURES REQUIRED ONLY FOR REVISED BUDGET (GPM 233)

APPENDIX VI

SUMMARY OF ALL CURRENT AND PENDING RESEARCH SUPPORT [FROM WHATEVER SOURCE]

The following information should be provided for each investigator and other senior personnel (see p. 6). Failure to provide this information may delay consideration of the proposal.

	A	B	C	D	E[1]		F
	Source of Support[3]	Project Title[2]	Award Amount (or Annual Rate)	Period Covered By Award	Person-Months Or % of Effort Committed To The Project		Location Where Research Is/Will Be Performed
					ACAD.	SUMM.	
I. (Name of Principal Investigator)	Gordon Conferences,	Inc.	10,500	6/21-7/3/87			
A. *Current Support* List—If none, Report none	—	—	—	—	—	—	—
B. *Proposals Pending*							
1. List this proposal	NSF	—	27,350	"	—	—	—
2. Other pending proposals, including renewal applications. If none, report none.	NIH	—	27,350	"	—	—	—
3. Proposals planned to be submitted in near future. If none, report none.	—	—	—	—	—	—	—
II. (Name of co-principal investigator and/or faculty associate)	—	—	—	—	—	—	—
A.							
B.							
III. Transfer of Support If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.	—	—	—	—	—	—	—
IV. (Other agencies to which this proposal has been/will be submitted)	—						

[1] Nonacademic researchers may report percentage of total research effort using the first column only.

[2] Entry of project title should be by number coding (i.e., 1,2,...) and the full titles should be identified according to number at the bottom of the form (i.e., 1. full title; 2. full title....)

[3] Include NSF, other Federal and State Agencies, and private sources.

USE ADDITIONAL SHEETS AS NECESSARY

JUSTIFICATION

The Gordon Research Conferences require that each participant pay a fixed registration fee and subsistence cost of $275. It is necessary to support this cost as well as the cost of travel (airfare) for the speakers and chairpersons from their home institutions to Boston Logan Airport, because most key investigators do not have the funds needed for attendance at this important meeting. The continued success of this Gordon conference on Phagocytes is measured entirely by its ability to attract as speakers those investigators that stand out in their field.

Of the total amount of $37,850 required to meet the anticipated expenses, up to $10,500 will be provided by the Gordon Research conferences. If the total sum awarded to this conference from all sources exceeds the amount spent for travel and conference fees of the invited speakers and chairpersons, expenses will be paid in such a way that the proportion of each award will be used (Gordon Research Funds will be used first, then additional funds). Any surplus will be returned to the granting agencies.

The topics to be covered and role of each person listed in the description of the program are detailed under the Research Plan. Persons not named specifically are speakers and participants not yet chosen as of October 1986.

Travel costs are estimated as round-trip tourist class air fares currently in force.